WHAT IS CLAIMED IS:

1. An apparatus that counts pixels in regions of interest within data present on a data bus, the data on the data bus including image data having active and inactive pixels, the apparatus comprising a pixel counter, coupled to the data bus, that selectively reads the image data from the data on the data bus and that generates a pixel count based on the active pixels of the image data.

2. The apparatus according to claim 1, wherein the pixel counter includes:

a pixel count controller coupled to the data bus that determines whether the data on the data bus is image data based on the image data identifying portion;

a counter coupled to the pixel count controller that counts the active pixels of the image data; and

a memory, coupled to the pixel counter controller and the counter, that stores the pixel count.

3. The apparatus according to claim 1, wherein the data on the data bus includes a data portion, a memory address portion, and an image data identifying portion.

4. The apparatus according to claim 3, wherein the image data identifying portion is an image data flag that indicates whether the data on the data bus is image data.

5. The apparatus according to claim 3, wherein:

the image data identifier portion includes an address; and

when the image data identifier portion is the address of an image data memory connected to the bus, the pixel counter determines that the data on the data bus is image data.

6. The apparatus according to claim 1, wherein the image data is grouped into a scan line, the scan line comprising at least one row of pixels extending across an image.

7. The apparatus according to claim 6, wherein each scan line is divided into a plurality of frames, each of the frames comprising a predetermined number of consecutive pixels of the scan line.

8. The apparatus according to claim 7, wherein the plurality of frames are further divided into a plurality of pixel blocks, each of the pixel blocks comprising a predetermined number consecutive pixels of a frame.

9. The apparatus according to claim 7, wherein:

the pixel counter generates the pixel count based on the pixel count in each of the frame; and

a memory separately stores the active count of each frame.

10. The apparatus according to claim 6, wherein the pixel counter generates the pixel count based on the active pixels of each of the scan lines.

11. The apparatus according to claim 1, wherein the pixel counter comprises:

an adder that receives image data and counts the active pixels present in the image data;

a frame counter that measures the amount of image data being added by the adder and instructs a memory to read the active pixel count from the adder and store the read pixel count when a frame of image data has been counted.

12. A method for counting pixels in regions of interest within data on a data bus in a printer using an independent pixel counter connected to the data bus, the data on the data bus including image data having active and inactive pixels, the method comprising:

monitoring the data bus for data;

selectively reading, in response to an image data identifying portion of the address on the address bus, image data on the data bus;

generating, in the independent pixel counter, a pixel count based on the active bits of the image data; and

outputting the pixel count from the independent pixel counter.

13. The method according to claim 12, wherein selectively reading the image data comprises selectively reading the image data from the data bus based on an active image data flag portion of the data on the data bus.

14. The method according to claim 12, wherein the image data is grouped into a scan line, the scan line comprising a single row of pixels extending across a width of an image.

15. The method according to claim 14, wherein each scan line is divided into a plurality of frames, each of the frames comprising a predetermined number of consecutive pixels of the scan line.

16. The method according to claim 14, wherein the plurality of frames are

further divided into a plurality of pixel blocks, each of the pixel blocks comprising a predetermined number of consecutive pixels of a frame.

17. The method according to claim 14, wherein generating the pixel count comprises generating the pixel count based on the pixel count in each of the frames, and separately storing the pixel count of each frame.

18. The method according to claim 12, wherein selectively reading the image data comprises selectively reading the image data from the data bus based on an address in the image data identifying portion of the data on the data bus.

19. The method according to claim 18, wherein the data on the data bus is image data if the address is the address of a memory.